

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior listings of claims in the present application.

What Is Claimed Is:

1. (canceled)

2. (currently amended) The A cellular system as claimed in claim 1, including:

at least one mobile station being concurrently linked through dedicated physical channels to plural link base stations in a soft handover state,

wherein at least one packet-transmitting base station of said plural base stations transmits at least one packet through a common channel to said at least one mobile station,

wherein said at least one mobile station includes:

a first transmission power control function of controlling a current transmission power of an up-link of said dedicated physical channel based on a first transmission power control information included in down-links of said dedicated physical channels of said plural link base stations; and

a second transmission power control function of controlling said current transmission power of said up-link of said dedicated physical channel based on a second transmission power control information included in a down-link of said dedicated physical channel of said at least one packet-transmitting base station,

wherein if said at least one mobile station is placed in a first state to receive a packet from said at least one packet-transmitting base station, then said at least one mobile station activates

said second transmission power control function, and wherein if said at least one mobile station is placed in a second state other than said first state, then said at least one mobile station activates said first transmission power control function, and

wherein after said at least one mobile station has been placed in said first state, then said second transmission power control function decides an off-set power based on said second transmission power control information and increases said current transmission power by said off-set power, before said at least one mobile station will make a first transmission of an acknowledge/non-acknowledge signal to said at least one packet-transmitting base station.

3. (original) The system as claimed in claim 2, wherein said second transmission power control function adjusts said off-set power based on said second transmission power control information which includes a difference in propagation loss between said at least one packet-transmitting base station and other of said plural link base stations in said soft handover state than said at least one packet-transmitting base station.

4. (original) The system as claimed in claim 2, wherein said second transmission power control function adjusts said off-set power based on said second transmission power control information which includes the number of times of receipt of a first transmission power control signal indicating a request for power-increase from said at least one packet-transmitting base station for a predetermined period of time.

5. (original) The system as claimed in claim 2, wherein said second transmission power control function adjusts said off-set power based on said second transmission power control information

which includes a receiving quality of a common pilot signal transmitted from each of said plural link base stations in said soft handover state.

6. (original) The system as claimed in claim 2, wherein said second transmission power control function adjusts said off-set power based on said second transmission power control information which includes the number of times of receipt of a null transmit power control signal having a receiving quality lower than a predetermined threshold receiving quality level transmitted from said at least one packet-transmitting base station.

7. (original) The system as claimed in claim 2, wherein after said at least one mobile station has activated said second transmission power control function, then said second transmission power control function decides said off-set power.

8. (original) The system as claimed in claim 2, wherein after said at least one mobile station has activated said second transmission power control function, then said second transmission power control function decides said off-set power based on a difference between said second transmission power control information received from said at least one packet-transmitting base station and other transmission power control information received from other of said plural link base stations in said soft handover state than said at least one packet-transmitting base station.

9. (original) The system as claimed in claim 2, wherein said at least one packet-transmitting base station includes an additional function of increasing, by a predetermined secondary off-set power, a secondary transmission power for transmitting said second transmit power control

information to said at least one mobile station, after said at least one packet-transmitting base station has transmitted an advance notice of packet transmission to said at least one mobile station.

10. (original) The system as claimed in claim 9, wherein said additional function further decreases said increased secondary transmission power by said predetermined secondary off-set power, after said at least one packet-transmitting base station has received a notice of completion of packet transmission from said at least one mobile station.

11. (original) The system as claimed in claim 2, wherein said second transmission power control information includes a first number of times of receipt of a first transmission power control signal which indicates a first request for power-increase, and a second number of times of receipt of a second transmission power control signal which indicates a second request for power-decrease,

wherein said second transmission power control function counts said first and second transmission power control signals separately, and said second transmission power control function compares said first number counted to a predetermined first threshold value and also compares said second number counted to a predetermined second threshold value, and

wherein if said first number counted exceeds said predetermined first threshold value, then said second transmission power control function increases said current transmission power, and if said number counted exceeds said predetermined second threshold value, then said second transmission power control function decreases said current transmission power.

12. (original) The system as claimed in claim 11, wherein said predetermined first threshold value is smaller than said predetermined second threshold value.

13. (original) The system as claimed in claim 2, wherein said second transmission power control information includes a transmission power control signal transmitted from said at least one packet-transmitting base station, and said second transmission power control function measures a receiving quality of said transmission power control signal and compares said receiving quality measured to a predetermined threshold value, and

wherein if said receiving quality measured is lower than said predetermined threshold value, then said second transmission power control function considers that said transmission power control signal indicates a first request for power-increase, and said second transmission power control function increases said current transmission power.

14. (original) The system as claimed in claim 2, wherein said first transmission power control information includes a first synthesized signal from a first number of first transmission control signals received said first number of times and transmitted from each of said plural link base stations, and said first transmission power control function controls said current transmission power based on said first synthesized signal,

wherein said second transmission power control information includes a second synthesized signal from a second number of second transmission control signals received said second number of times and transmitted from said at least one packet-transmitting base station as well as a third synthesized signal from said first number of second transmission control signals received said first number of times and transmitted from said at least one packet-transmitting

base station, and said second transmission power control function controls said current transmission power based on said second synthesized signal before said at least one mobile station will make said first transmission of said acknowledge/non-acknowledge signal to said at least one packet-transmitting base station, and said second transmission power control function controls said current transmission power based on said third synthesized signal after said at least one mobile station has made said first transmission of said acknowledge/non-acknowledge signal to said at least one packet-transmitting base station.

15. (original) The system as claimed in claim 14, wherein said second number is smaller than said first number.

16. (currently amended) ~~The~~ A cellular system as claimed in claim 1, including:

at least one mobile station being concurrently linked through dedicated physical channels to plural link base stations in a soft handover state,

wherein at least one packet-transmitting base station of said plural base stations transmits at least one packet through a common channel to said at least one mobile station,

wherein said at least one mobile station includes:

a first transmission power control function of controlling a current transmission power of an up-link of said dedicated physical channel based on a first transmission power control information included in down-links of said dedicated physical channels of said plural link base stations; and

a second transmission power control function of controlling said current transmission power of said up-link of said dedicated physical channel based on a second

transmission power control information included in a down-link of said dedicated physical channel of said at least one packet-transmitting base station,

wherein if said at least one mobile station is placed in a first state to receive a packet from said at least one packet-transmitting base station, then said at least one mobile station activates said second transmission power control function, and wherein if said at least one mobile station is placed in a second state other than said first state, then said at least one mobile station activates said first transmission power control function, and

wherein if said at least one mobile station is placed in said first state, then said second transmission power control function makes a packet-transmitting-base-station priority control for controlling said current transmission power based on a transmission control signal which indicates at least one of a first request for power-increase and a second request for power-decrease and which has been transmitted from said at least one packet-transmitting base station, and

wherein if said at least one mobile station is placed in said second state, then said second transmission power control function makes a power-down priority control for decreasing said current transmission power by a predetermined power level if at least one of transmission power control signals transmitted from all of said plural link base stations indicates a request for power-decrease, and for increasing said current transmission power by another predetermined power level if all of said transmission power control signals transmitted from all of said plural link base stations indicate another request for power-increase.

17. (canceled)

18. (currently amended) The A mobile station as claimed in claim 17, included in a cellular system and being concurrently linked through dedicated physical channels to plural link base stations in a soft handover state, said mobile station including:

a first transmission power control function of controlling a current transmission power of an up-link of said dedicated physical channel based on a first transmission power control information included in down-links of said dedicated physical channels of said plural link base stations; and

a second transmission power control function of controlling said current transmission power of said up-link of said dedicated physical channel based on a second transmission power control information included in a down-link of said dedicated physical channel of at least one packet-transmitting base station of said plural base stations, and said at least one packet-transmitting base station transmitting at least one packet through a common channel to said mobile station,

wherein if said mobile station is placed in a first state to receive a packet from said at least one packet-transmitting base station, then said mobile station activates said second transmission power control function,

wherein if said mobile station is placed in a second state other than said first state, then said mobile station activates said first transmission power control function, and

wherein after said mobile station has been placed in said first state, then said second transmission power control function decides an off-set power based on said second transmission power control information and increases said current transmission power by said off-set power, before said mobile station will make a first transmission of an acknowledge/non-acknowledge signal to said at least one packet-transmitting base station.

19. (original) The mobile station as claimed in claim 18, wherein said second transmission power control function adjusts said off-set power based on said second transmission power control information which includes a difference in propagation loss between said at least one packet-transmitting base station and other of said plural link base stations in said soft handover state than said at least one packet-transmitting base station.

20. (original) The mobile station as claimed in claim 18, wherein said second transmission power control function adjusts said off-set power based on said second transmission power control information which includes the number of times of receipt of a first transmission power control signal indicating a request for power-increase from said at least one packet-transmitting base station for a predetermined period of time.

21. (original) The mobile station as claimed in claim 18, wherein said second transmission power control function adjusts said off-set power based on said second transmission power control information which includes a receiving quality of a common pilot signal transmitted from each of said plural link base stations in said soft handover state.

22. (original) The mobile station as claimed in claim 18, wherein said second transmission power control function adjusts said off-set power based on said second transmission power control information which includes the number of times of receipt of a null transmit power control signal having a receiving quality lower than a predetermined threshold receiving quality level transmitted from said at least one packet-transmitting base station.

23. (original) The mobile station as claimed in claim 18, wherein after said mobile station has activated said second transmission power control function, then said second transmission power control function decides said off-set power.

24. (original) The mobile station as claimed in claim 18, wherein after said mobile station has activated said second transmission power control function, then said second transmission power control function decides said off-set power based on a difference between said second transmission power control information received from said at least one packet-transmitting base station and other transmission power control information received from other of said plural link base stations in said soft handover state than said at least one packet-transmitting base station.

25. (original) The mobile station as claimed in claim 18, wherein said second transmission power control information includes a first number of times of receipt of a first transmission power control signal which indicates a first request for power-increase, and a second number of times of receipt of a second transmission power control signal which indicates a second request for power-decrease,

wherein said second transmission power control function counts said first and second transmission power control signals separately, and said second transmission power control function compares said first number counted to a predetermined first threshold value and also compares said second number counted to a predetermined second threshold value, and

wherein if said first number counted exceeds said predetermined first threshold value, then said second transmission power control function increases said current transmission power,

and if said number counted exceeds said predetermined second threshold value, then said second transmission power control function decreases said current transmission power.

26. (original) The mobile station as claimed in claim 25, wherein said predetermined first threshold value is smaller than said predetermined second threshold value.

27. (original) The mobile station as claimed in claim 18, wherein said second transmission power control information includes a transmission power control signal transmitted from said at least one packet-transmitting base station, and said second transmission power control function measures a receiving quality of said transmission power control signal and compares said receiving quality measured to a predetermined threshold value, and

wherein if said receiving quality measured is lower than said predetermined threshold value, then said second transmission power control function considers that said transmission power control signal indicates a first request for power-increase, and said second transmission power control function increases said current transmission power.

28. (original) The mobile station as claimed in claim 18, wherein said first transmission power control information includes a first synthesized signal from a first number of first transmission control signals received said first number of times and transmitted from each of said plural link base stations, and said first transmission power control function controls said current transmission power based on said first synthesized signal,

wherein said second transmission power control information includes a second synthesized signal from a second number of second transmission control signals received said

Serial No.: 10/642,896

second number of times and transmitted from said at least one packet-transmitting base station as well as a third synthesized signal from said first number of second transmission control signals received said first number of times and transmitted from said at least one packet-transmitting base station, and said second transmission power control function controls said current transmission power based on said second synthesized signal before said mobile station will make said first transmission of said acknowledge/non-acknowledge signal to said at least one packet-transmitting base station, and said second transmission power control function controls said current transmission power based on said third synthesized signal after said mobile station has made said first transmission of said acknowledge/non-acknowledge signal to said at least one packet-transmitting base station.

29. (original) The mobile station as claimed in claim 28, wherein said second number is smaller than said first number.

30. (currently amended) ~~The~~A mobile station as claimed in claim 17, included in a cellular system and being concurrently linked through dedicated physical channels to plural link base stations in a soft handover state, said mobile station including:

a first transmission power control function of controlling a current transmission power of an up-link of said dedicated physical channel based on a first transmission power control information included in down-links of said dedicated physical channels of said plural link base stations; and

a second transmission power control function of controlling said current transmission power of said up-link of said dedicated physical channel based on a second transmission power

control information included in a down-link of said dedicated physical channel of at least one packet-transmitting base station of said plural base stations, and said at least one packet-transmitting base station transmitting at least one packet through a common channel to said mobile station,

wherein if said mobile station is placed in a first state to receive a packet from said at least one packet-transmitting base station, then said mobile station activates said second transmission power control function,

wherein if said mobile station is placed in a second state other than said first state, then said mobile station activates said first transmission power control function,

wherein if said mobile station is placed in said first state, then said second transmission power control function makes a packet-transmitting-base-station priority control for controlling said current transmission power based on a transmission control signal which indicates at least one of a first request for power-increase and a second request for power-decrease and which has been transmitted from said at least one packet-transmitting base station, and

wherein if said mobile station is placed in said second state, then said second transmission power control function makes a power-down priority control for decreasing said current transmission power by a predetermined power level if at least one of transmission power control signals transmitted from all of said plural link base stations indicates a request for power-decrease, and for increasing said current transmission power by another predetermined power level if all of said transmission power control signals transmitted from all of said plural link base stations indicate another request for power-increase.

31-33. (canceled)

34. (currently amended) ~~The~~A ~~method as claimed in claim 33,~~ of controlling a transmission power in a cellular system including at least one mobile station being concurrently linked through dedicated physical channels to plural link base stations in a soft handover state, and at least one packet-transmitting base station of said plural base stations transmitting at least one packet through a common channel to said at least one mobile station, said method comprising:

a first transmission power control process for controlling a current transmission power of an up-link of said dedicated physical channel based on a first transmission power control information included in down-links of said dedicated physical channels of said plural link base stations; and

a second transmission power control process for controlling said current transmission power of said up-link of said dedicated physical channel based on a second transmission power control information included in a down-link of said dedicated physical channel of said at least one packet-transmitting base station,

wherein if said at least one mobile station is placed in a first state to receive a packet from said at least one packet-transmitting base station, then said at least one mobile station performs said second transmission power control process,

wherein if said at least one mobile station is placed in a second state other than said first state, then said at least one mobile station performs said first transmission power control process,
and

wherein after said at least one mobile station has been placed in said first state, then said second transmission power control process decides an off-set power based on said second transmission power control information and increases said current transmission power by said

off-set power, before said at least one mobile station will make a first transmission of an acknowledge/non-acknowledge signal to said at least one packet-transmitting base station.

35. (original) The method as claimed in claim 34, wherein said second transmission power control process adjusts said off-set power based on said second transmission power control information which includes a difference in propagation loss between said at least one packet-transmitting base station and other of said plural link base stations in said soft handover state than said at least one packet-transmitting base station.

36. (original) The method as claimed in claim 34, wherein said second transmission power control process adjusts said off-set power based on said second transmission power control information which includes the number of times of receipt of a first transmission power control signal indicating a request for power-increase from said at least one packet-transmitting base station for a predetermined period of time.

37. (original) The method as claimed in claim 34, wherein said second transmission power control process adjusts said off-set power based on said second transmission power control information which includes a receiving quality of a common pilot signal transmitted from each of said plural link base stations in said soft handover state.

38. (original) The method as claimed in claim 34, wherein said second transmission power control process adjusts said off-set power based on said second transmission power control information which includes the number of times of receipt of a null transmit power control signal

having a receiving quality lower than a predetermined threshold receiving quality level transmitted from said at least one packet-transmitting base station.

39. (original) The method as claimed in claim 34, wherein after said at least one mobile station has performed said second transmission power control process, then said second transmission power control process decides said off-set power.

40. (original) The method as claimed in claim 34, wherein after said at least one mobile station has performed said second transmission power control process, then said second transmission power control process decides said off-set power based on a difference between said second transmission power control information received from said at least one packet-transmitting base station and other transmission power control information received from other of said plural link base stations in said soft handover state than said at least one packet-transmitting base station.

41. (original) The method as claimed in claim 34, further including an additional process performed by said at least one packet-transmitting base station for increasing, by a predetermined secondary off-set power, a secondary transmission power for transmitting said second transmit power control information to said at least one mobile station, after said at least one packet-transmitting base station has transmitted an advance notice of packet transmission to said at least one mobile station.

42. (original) The method as claimed in claim 41, wherein said additional process further decreases said increased secondary transmission power by said predetermined secondary off-set

power, after said at least one packet-transmitting base station has received a notice of completion of packet transmission from said at least one mobile station.

43. (original) The method as claimed in claim 34, wherein said second transmission power control information includes a first number of times of receipt of a first transmission power control signal which indicates a first request for power-increase, and a second number of times of receipt of a second transmission power control signal which indicates a second request for power-decrease,

wherein said second transmission power control process counts said first and second transmission power control signals separately, and said second transmission power control process compares said first number counted to a predetermined first threshold value and also compares said second number counted to a predetermined second threshold value, and

wherein if said first number counted exceeds said predetermined first threshold value, then said second transmission power control process increases said current transmission power, and if said number counted exceeds said predetermined second threshold value, then said second transmission power control process decreases said current transmission power.

44. (original) The method as claimed in claim 43, wherein said predetermined first threshold value is smaller than said predetermined second threshold value.

45. (original) The method as claimed in claim 34, wherein said second transmission power control information includes a transmission power control signal transmitted from said at least one packet-transmitting base station, and said second transmission power control process

measures a receiving quality of said transmission power control signal and compares said receiving quality measured to a predetermined threshold value, and

wherein if said receiving quality measured is lower than said predetermined threshold value, then said second transmission power control process considers that said transmission power control signal indicates a first request for power-increase, and said second transmission power control process increases said current transmission power.

46. (original) The method as claimed in claim 34, wherein said first transmission power control information includes a first synthesized signal from a first number of first transmission control signals received said first number of times and transmitted from each of said plural link base stations, and said first transmission power control process controls said current transmission power based on said first synthesized signal,

wherein said second transmission power control information includes a second synthesized signal from a second number of second transmission control signals received said second number of times and transmitted from said at least one packet-transmitting base station as well as a third synthesized signal from said first number of second transmission control signals received said first number of times and transmitted from said at least one packet-transmitting base station, and said second transmission power control process controls said current transmission power based on said second synthesized signal before said at least one mobile station will make said first transmission of said acknowledge/non-acknowledge signal to said at least one packet-transmitting base station, and said second transmission power control process controls said current transmission power based on said third synthesized signal after said at least

one mobile station has made said first transmission of said acknowledge/non-acknowledge signal to said at least one packet-transmitting base station.

47. (original) The method as claimed in claim 46, wherein said second number is smaller than said first number.

48. (currently amended) ~~The~~A method as claimed in claim 33, of controlling a transmission power in a cellular system including at least one mobile station being concurrently linked through dedicated physical channels to plural link base stations in a soft handover state, and at least one packet-transmitting base station of said plural base stations transmitting at least one packet through a common channel to said at least one mobile station, said method comprising:

a first transmission power control process for controlling a current transmission power of an up-link of said dedicated physical channel based on a first transmission power control information included in down-links of said dedicated physical channels of said plural link base stations; and

a second transmission power control process for controlling said current transmission power of said up-link of said dedicated physical channel based on a second transmission power control information included in a down-link of said dedicated physical channel of said at least one packet-transmitting base station,

wherein if said at least one mobile station is placed in a first state to receive a packet from said at least one packet-transmitting base station, then said at least one mobile station performs said second transmission power control process,

wherein if said at least one mobile station is placed in a second state other than said first state, then said at least one mobile station performs said first transmission power control process,

wherein if said at least one mobile station is placed in said first state, then said second transmission power control process makes a packet-transmitting-base-station priority control for controlling said current transmission power based on a transmission control signal which indicates at least one of a first request for power-increase and a second request for power-decrease and which has been transmitted from said at least one packet-transmitting base station, and

wherein if said at least one mobile station is placed in said second state, then said second transmission power control process makes a power-down priority control for decreasing said current transmission power by a predetermined power level if at least one of transmission power control signals transmitted from all of said plural link base stations indicates a request for power-decrease, and for increasing said current transmission power by another predetermined power level if all of said transmission power control signals transmitted from all of said plural link base stations indicate another request for power-increase.

49. (canceled)

50. (currently amended) ~~The~~A computer-readable recording medium having recorded thereon a computer program as claimed in claim 49, the computer program implementing, when executed, a method of controlling a transmission power in a cellular system including at least one mobile station being concurrently linked through dedicated physical channels to plural link base stations in a soft handover state, and at least one packet-transmitting base station of said plural base

stations transmitting at least one packet through a common channel to said at least one mobile station, and

wherein said computer program includes:

a first transmission power control process for controlling a current transmission power of an up-link of said dedicated physical channel based on a first transmission power control information included in down-links of said dedicated physical channels of said plural link base stations; and

a second transmission power control process for controlling said current transmission power of said up-link of said dedicated physical channel based on a second transmission power control information included in a down-link of said dedicated physical channel of said at least one packet-transmitting base station,

wherein if said at least one mobile station is placed in a first state to receive a packet from said at least one packet-transmitting base station, then said at least one mobile station performs said second transmission power control process,

wherein if said at least one mobile station is placed in a second state other than said first state, then said at least one mobile station performs said first transmission power control process,
and

wherein after said at least one mobile station has been placed in said first state, then said second transmission power control process decides an off-set power based on said second transmission power control information and increases said current transmission power by said off-set power, before said at least one mobile station will make a first transmission of an acknowledge/non-acknowledge signal to said at least one packet-transmitting base station.

51. (original) The computer program as claimed in claim 50, wherein said second transmission power control process adjusts said off-set power based on said second transmission power control information which includes a difference in propagation loss between said at least one packet-transmitting base station and other of said plural link base stations in said soft handover state than said at least one packet-transmitting base station.

52. (original) The computer program as claimed in claim 50, wherein said second transmission power control process adjusts said off-set power based on said second transmission power control information which includes the number of times of receipt of a first transmission power control signal indicating a request for power-increase from said at least one packet-transmitting base station for a predetermined period of time.

53. (original) The computer program as claimed in claim 50, wherein said second transmission power control process adjusts said off-set power based on said second transmission power control information which includes a receiving quality of a common pilot signal transmitted from each of said plural link base stations in said soft handover state.

54. (original) The computer program as claimed in claim 50, wherein said second transmission power control process adjusts said off-set power based on said second transmission power control information which includes the number of times of receipt of a null transmit power control signal having a receiving quality lower than a predetermined threshold receiving quality level transmitted from said at least one packet-transmitting base station.

55. (original) The computer program as claimed in claim 50, wherein after said at least one mobile station has performed said second transmission power control process, then said second transmission power control process decides said off-set power.

56. (original) The computer program as claimed in claim 50, wherein after said at least one mobile station has performed said second transmission power control process, then said second transmission power control process decides said off-set power based on a difference between said second transmission power control information received from said at least one packet-transmitting base station and other transmission power control information received from other of said plural link base stations in said soft handover state than said at least one packet-transmitting base station.

57. (original) The computer program as claimed in claim 50, further including an additional process performed by said at least one packet-transmitting base station for increasing, by a predetermined secondary off-set power, a secondary transmission power for transmitting said second transmit power control information to said at least one mobile station, after said at least one packet-transmitting base station has transmitted an advance notice of packet transmission to said at least one mobile station.

58. (original) The computer program as claimed in claim 57, wherein said additional process further decreases said increased secondary transmission power by said predetermined secondary off-set power, after said at least one packet-transmitting base station has received a notice of completion of packet transmission from said at least one mobile station.

59. (original) The computer program as claimed in claim 50, wherein said second transmission power control information includes a first number of times of receipt of a first transmission power control signal which indicates a first request for power-increase, and a second number of times of receipt of a second transmission power control signal which indicates a second request for power-decrease,

wherein said second transmission power control process counts said first and second transmission power control signals separately, and said second transmission power control process compares said first number counted to a predetermined first threshold value and also compares said second number counted to a predetermined second threshold value, and

wherein if said first number counted exceeds said predetermined first threshold value, then said second transmission power control process increases said current transmission power, and if said number counted exceeds said predetermined second threshold value, then said second transmission power control process decreases said current transmission power.

60. (original) The computer program as claimed in claim 59, wherein said predetermined first threshold value is smaller than said predetermined second threshold value.

61. (original) The computer program as claimed in claim 50, wherein said second transmission power control information includes a transmission power control signal transmitted from said at least one packet-transmitting base station, and said second transmission power control process measures a receiving quality of said transmission power control signal and compares said receiving quality measured to a predetermined threshold value, and

wherein if said receiving quality measured is lower than said predetermined threshold value, then said second transmission power control process considers that said transmission power control signal indicates a first request for power-increase, and said second transmission power control process increases said current transmission power.

62. (original) The computer program as claimed in claim 50, wherein said first transmission power control information includes a first synthesized signal from a first number of first transmission control signals received said first number of times and transmitted from each of said plural link base stations, and said first transmission power control process controls said current transmission power based on said first synthesized signal,

wherein said second transmission power control information includes a second synthesized signal from a second number of second transmission control signals received said second number of times and transmitted from said at least one packet-transmitting base station as well as a third synthesized signal from said first number of second transmission control signals received said first number of times and transmitted from said at least one packet-transmitting base station, and said second transmission power control process controls said current transmission power based on said second synthesized signal before said at least one mobile station will make said first transmission of said acknowledge/non-acknowledge signal to said at least one packet-transmitting base station, and said second transmission power control process controls said current transmission power based on said third synthesized signal after said at least one mobile station has made said first transmission of said acknowledge/non-acknowledge signal to said at least one packet-transmitting base station.

63. (original) The computer program as claimed in claim 62, wherein said second number is smaller than said first number.

64. (currently amended) ~~The~~A computer-readable recording medium having recorded thereon a computer program as claimed in claim 49, the computer program implementing, when executed, a method of controlling a transmission power in a cellular system including at least one mobile station being concurrently linked through dedicated physical channels to plural link base stations in a soft handover state, and at least one packet-transmitting base station of said plural base stations transmitting at least one packet through a common channel to said at least one mobile station, and

wherein said computer program includes:

a first transmission power control process for controlling a current transmission power of an up-link of said dedicated physical channel based on a first transmission power control information included in down-links of said dedicated physical channels of said plural link base stations; and

a second transmission power control process for controlling said current transmission power of said up-link of said dedicated physical channel based on a second transmission power control information included in a down-link of said dedicated physical channel of said at least one packet-transmitting base station,

wherein if said at least one mobile station is placed in a first state to receive a packet from said at least one packet-transmitting base station, then said at least one mobile station performs said second transmission power control process,

wherein if said at least one mobile station is placed in a second state other than said first state, then said at least one mobile station performs said first transmission power control process,

wherein if said at least one mobile station is placed in said first state, then said second transmission power control process makes a packet-transmitting-base-station priority control for controlling said current transmission power based on a transmission control signal which indicates at least one of a first request for power-increase and a second request for power-decrease and which has been transmitted from said at least one packet-transmitting base station, and

wherein if said at least one mobile station is placed in said second state, then said second transmission power control process makes a power-down priority control for decreasing said current transmission power by a predetermined power level if at least one of transmission power control signals transmitted from all of said plural link base stations indicates a request for power-decrease, and for increasing said current transmission power by another predetermined power level if all of said transmission power control signals transmitted from all of said plural link base stations indicate another request for power-increase.